



V### VALVE ASSEMBLY INSTRUCTIONS

THESE INSTRUCTIONS ARE PROVIDED AS GUIDELINES FOR THE PROPER ASSEMBLY OF THE V080 & V130 VALVES. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN LEAKS, BINDING SPOOLS, OR POOR PERFORMANCE.

REFERENCE FIG. 1

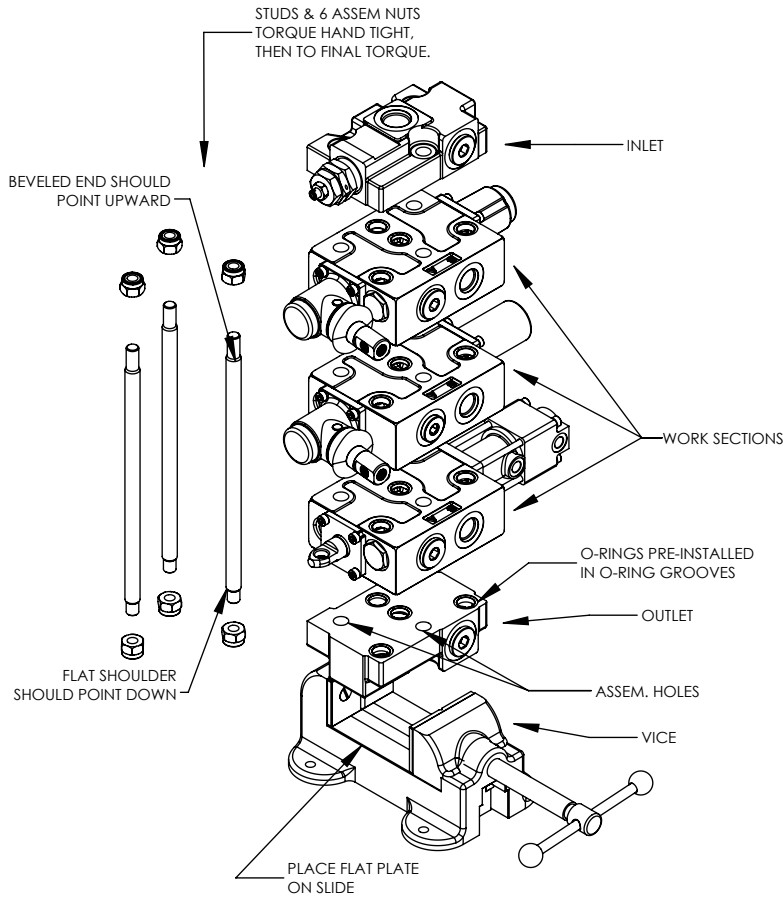


FIG. 1

INITIAL AND FINAL TORQUES PER SERIES		
VALVE SERIES	INITIAL TORQUE (IN. LBS)	FINAL TORQUE (IN. LBS.)
V080	20	266
V130	20	620

STUD KIT SELECTION TABLE	
# OF WORK SECTIONS	STUD KIT #
1	V###-T01
2	V###-T02
3	V###-T03
4	V###-T04
5	V###-T05
6	V###-T06
7	V###-T07
8	V###-T08
9	V###-T09
10	V###-T10

*REPLACE THE "###" WITH CORRECT VALVE SERIES NUMBERS.

1. PLACE STUDS IN VICE WITH FLAT, SHOULDER SIDE UPWARD. THREAD NUT ON TO EACH STUD AND TIGHTEN UNTIL NUT STOPS ON STUD SHOULDER
2. PLACE STUDS IN OUTLET ALLOWING THE STUDS TO MAKE CONTACT WITH OUTLET CASTING
3. CLAMP OUTLET SECTION INTO A VICE WITH THE MACHINED SURFACE & STUDS POINTING UP. LAY SOMETHING FLAT ACROSS THE VISE SLIDE WHICH WILL BE USED TO HOLD THE STUDS IN PLACE WHILE THE ASSEMBLY IS COMPLETED. ENSURE THAT THE BEVELED STUD END IS SHOWING
4. SLIDE EACH WORK SECTION WITH THE O-RINGS POSITIONED UPWARDS OVER THE STUDS AND ON TOP OF THE PREVIOUS SECTION. BE CAREFUL TO KEEP THE O-RINGS IN POSITION SO THEY AREN'T OUT OF THE GROOVES. SOMETIMES A LIGHT COATING OF GREASE MAY HELP HOLD THE SEALS IN PLACE. THE SEALS SHOULD ALREADY BE PRE-INSTALLED IN ALL O-RING GROOVES, BUT IF MISSING REPLACE.
5. V080 ONLY: THE LOAD CHECKS IN THE V080 WORK SECTIONS CAN SOMETIMES CAUSE ASSEMBLY ISSUES. IF THIS HAPPENS, PLACE A THIN BOARD ON THE WORK SECTION FACE AND LIGHTLY TAP WITH MALLETT TO ALIGN LOAD CHECKS
6. INSTALL THE INLET SECTION AFTER ALL OF THE WORK SECTIONS HAVE BEEN INSTALLED.
7. INSTALL THE UPPER LOCK NUTS, MAKE THEM FINGER TIGHT.
8. TORQUE ALL 6 NUTS TO THE INITIAL TORQUE, THEN TORQUE ALL 6 NUTS TO THE FINAL TORQUE. (TORQUE VALUES ARE LOCATED IN TABLE AT LEFT)
9. SHIFT ALL VALVE SPOOLS TO MAKE SURE THEY MOVE FREELY. ANY TIGHTNESS OR BINDING COULD BE THE RESULT OF AN O-RING OUT OF PLACE OR IMPROPER TORQUE PROCEDURES.
10. THE BASIC VALVE IS NOW ASSEMBLED. YOU CAN NOW PROCEED WITH ANY ADDITIONAL OPTIONS OR FLOW SETTINGS AS DESCRIBED IN THE DOCUMENTS FOR THE SPECIFIC KIT BEING INSTALLED.